

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-18. Canceled.

19. (Previously presented) An isolated protein comprising the full-length amino acid sequence of SEQ ID NO:2.

20. (Presently presented) An isolated protein having at least 85% sequence identity to SEQ ID NO:2, which protein, (a) when used as an immunogen, raises antibodies which recognize full-length mesothelin (SEQ ID NO:2) or (b) is recognized by T-cells from patients with mesothelioma- or ovarian cancer-cells expressing mesothelin.

21. (Previously presented) An isolated peptide having 90% sequence identity over a comparison window of about 10-20 amino acid residues to mesothelin (SEQ ID NO:2), which peptide, (a) when used as an immunogen, raises antibodies which recognize full-length mesothelin (SEQ ID NO:2) or (b) is recognized by T-cells from patients with mesothelioma- or ovarian cancer- cells expressing mesothelin.

22. (Previously presented) An isolated peptide of claim 21, which peptide comprises 10 or more contiguous amino acids of SEQ ID NO:2.

23. (Previously presented) A composition comprising a protein with at least 85% sequence identity to mesothelin (SEQ ID NO:2), which protein, (a) when used as an immunogen, raises antibodies which recognize full-length mesothelin (SEQ ID NO:2) or (b) is recognized by T-cells from patients with mesothelioma- or ovarian cancer- cells expressing mesothelin, and a pharmaceutically acceptable carrier.

24. (Previously presented) A composition of claim 23, further comprising an adjuvant.

25. (Previously presented) A composition of claim 23, wherein said protein is conjugated to a carrier.

26. (Previously presented) A composition of claim 23, wherein the protein has the sequence of SEQ ID NO:2.

27. (Previously presented) A composition comprising an isolated peptide comprising at least 10 contiguous amino acids of mesothelin (SEQ ID NO:2), which peptide, (a) when used as an immunogen, raises antibodies which recognize full-length mesothelin (SEQ ID NO:2) or (b) is recognized by T-cells from patients with mesothelioma- or ovarian cancer- cells expressing mesothelin.

28. (Previously presented) A composition of claim 27, further comprising an adjuvant.

29. (Previously presented) A composition of claim 27, wherein said peptide is conjugated to a carrier.

30. (Previously presented) A composition comprising an isolated peptide having 90% sequence identity over a comparison window of about 10-20 amino acid residues to mesothelin (SEQ ID NO:2), wherein said peptide, (a) when used as an immunogen, raises antibodies which recognize full-length mesothelin (SEQ ID NO:2) or (b) is recognized by T-cells from patients with mesothelioma- or ovarian cancer- cells expressing mesothelin.

31. (Previously presented) A composition of claim 30, further comprising an adjuvant.

32. (Previously presented) A composition of claim 30, wherein said peptide is conjugated to a carrier.

33. (New) An isolated peptide of claim 21, which peptide comprises 15 or more contiguous amino acids of SEQ ID NO:2.

34. (New) An isolated protein having at least 85% sequence identity to SEQ ID NO:2, which protein, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2).

35. (New) An isolated peptide having 90% sequence identity over a comparison window of about 10-20 amino acid residues to mesothelin (SEQ ID NO:2), which peptide, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2).

36. (New) An isolated peptide of claim 34, which peptide comprises 10 or more contiguous amino acids of SEQ ID NO:2.

37. (New) An isolated peptide of claim 35, which peptide comprises 15 or more contiguous amino acids of SEQ ID NO:2.

38. (New) An isolated peptide of claim 36, which peptide comprises 10 or more contiguous amino acids of SEQ ID NO:2 selected from the group consisting of amino acids 294 to 628.

39. (New) A composition comprising (a) a protein with at least 85% sequence identity to mesothelin (SEQ ID NO:2), which protein, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2) and (b) a pharmaceutically acceptable carrier.

40. (New) A composition of claim 36, further comprising an adjuvant.

41. (New) A composition of claim 36, wherein said protein is conjugated to a carrier.

42. (New) A composition of claim 36, wherein said peptide comprises at least 10 contiguous amino acids of mesothelin (SEQ ID NO:2), which peptide, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2).

43. (New) A composition of claim 36, further comprising an adjuvant.

44. (New) A composition comprising an isolated peptide having 90% sequence identity over a comparison window of about 10-20 amino acid residues to mesothelin (SEQ ID NO:2), wherein said peptide, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2).

45. (New) A composition of claim 44, further comprising an adjuvant.

46. (New) A composition of claim 44, wherein said peptide comprises 15 or more contiguous amino acid residues of SEQ ID NO:2, wherein said peptide, when used as an immunogen, raises antibodies which bind to mesothelin (SEQ ID NO:2).